

### Acute and Chronic Responses to Psychological Trauma: Where Do We Go From Here?

Three articles in this month's issue of the *Journal* use longitudinal designs to address important questions related to the acute and chronic effects of psychological trauma. Chris Brewin and his group in London demonstrated a close relationship between acute stress disorder and chronic posttraumatic stress disorder (PTSD). Danny Koren and colleagues in Israel found a strong correlation between symptom levels at successive points in time. They also showed that anxiety and depressive disorders developed in parallel with PTSD after exposure to psychological trauma. Robert Ursano's group at the Uniformed Services University of the Health Sciences found a greater risk for PTSD in disaster workers who personally identified with the dead. This study highlights the important role of attachment in the development of pathological responses to trauma involving exposure to death. All three studies shed light on acute and chronic responses to trauma.

Diagnostic approaches to psychological trauma have been subject to considerable fluctuation over the past century (1). There is a rich literature from World Wars I and II describing acute responses to the stress of the battlefield. Psychiatrists observed that soldiers often went into a daze, in which they did not know their name or where they were, accompanied by dissociative symptoms including amnesia and depersonalization (2). Probably in response to the memories of World War II, gross stress reaction was included in the first edition of DSM (DSM-I) in 1952. Gross stress reaction described acute psychological responses to stressors that occurred in an otherwise normal individual following exposure to an extreme stressor that would be traumatic for almost anyone and that rapidly resolved following cessation of the stressor. There was no disorder in DSM-I that involved long-term psychopathology following exposure to traumatic stress. It was perhaps the forgetting of the horrors of World War II that resulted in gross stress reaction being dropped from DSM-II in 1968. It was not until another major conflict, the Vietnam war, that mental disorders related to traumatic stress were once again recognized by psychiatrists. This time, however, there was a greater emphasis on the potentially chronic effects of traumatic stress on the mind. Following the Vietnam war, there was also a greater focus on the importance of stress, as opposed to other factors such as personality, in the development of psychopathology. This was the background leading to the inclusion of PTSD (with both acute and chronic types) as a disorder in DSM-III in 1980. The DSM-III task force (headed by the current Editor of *The American Journal of Psychiatry*) chose to define PTSD as a final common pathway occurring in response to many different types of catastrophic stressors, including burn injury, concentration camps, combat, and natural disasters. This was in opposition to those who argued for the uniqueness of individual traumas such as a "Vietnam syndrome" or "postrape syndrome" (ideas for which there is little empirical evidence) (3).

With the advent of the modern era of DSM, dissociative responses as an acute response to trauma were minimized. PTSD and dissociative disorders, however, are frequently seen in the same individuals, and dissociative responses to trauma were found to predict the later development of chronic PTSD (4-8). In addition, individ-

uals who have acute dissociative responses to trauma develop a chronic pattern of dissociation with minor stressors or reminders of the original trauma (8). In spite of the important role of psychological trauma in their development, dissociative disorders seemingly came out of nowhere in DSM, like Athena sprouting from the forehead of Zeus, without any framework (unlike PTSD) in psychological trauma.

The addition of acute stress disorder to DSM-IV in 1994 stimulated research in acute responses to trauma, as evidenced by the current issue of *The American Journal of Psychiatry*. Acute stress disorder reversed the trends of DSM-III-R, which did not include an acute trauma disorder, and returned to the traditions of DSM-I. Brewin and colleagues found that the presence or absence of a diagnosis of acute stress disorder predicted PTSD status at 6 months in 83% of cases. These findings are of interest because acute stress disorder has a prominent emphasis on dissociative symptoms (requiring three of the following: numbing, derealization, depersonalization, amnesia, or being "in a daze," as well as one or more of each of the PTSD symptoms of reexperiencing, avoidance, and hyperarousal), whereas DSM-IV PTSD has no dissociative symptom cluster. Brewin et al. also found that reexperiencing and hyperarousal (but not avoidance) were equally adept at predicting development of chronic PTSD. However, simply "raising the threshold" of symptoms in reexperiencing and hyperarousal clusters of acute stress disorder did not improve the ability of acute stress disorder to predict long-term PTSD.

The meaning of these findings is difficult to interpret. It may be that there are two subtypes of acute trauma response, one primarily dissociative and the other intrusive/hyperarousal, that both represent unique pathways to chronic stress-related psychopathology. These pathways may be determined by factors such as personality or previous stressors, and they may influence which individuals will develop chronic stress-related psychopathology. For example, individuals with a history of early childhood abuse may have more dissociative responses to subsequent traumas. The data from the study of Brewin et al. raise questions about the avoidance cluster of PTSD, given its weak ability to predict chronic PTSD. In fact, the avoidance cluster as currently configured does not hang together as a unified construct: several symptoms are dissociative (e.g., amnesia and emotional numbing), whereas others are behavioral (being cut off from others or avoiding reminders). These findings raise the question about whether acute stress disorder and PTSD should be combined into a single disorder that includes subgroups with acute (duration less than 1 month) and chronic symptoms. In order to make these disorders consistent, it would be necessary to add a dissociative symptom cluster to chronic PTSD. Another possibility would be to have diagnoses of acute and chronic PTSD (emphasizing intrusion and hyperarousal) and acute and chronic posttraumatic dissociative disorder. The chronic posttraumatic dissociative disorder would emphasize dissociative responses to subsequent stressors (amnesia, depersonalization). This diagnosis would allow proper recognition of the relationship between stress and dissociation and would allow dissociative amnesia and depersonalization (disorders that are rarely used in clinical practice) to be dropped. All of these disorders (as well as adjustment disorder and dissociative identity disorder) could be included in a new category of trauma spectrum disorders.

The study by Koren and colleagues in this issue addresses several important issues related to the natural course of acute and chronic responses to trauma. One popular theory that led to the inclusion of the avoidance cluster is that the natural course of PTSD is characterized by alternating waves of intrusions and avoidance. Retrospective studies of the natural history of PTSD (9), however, found no evidence for this, and the study by Koren et al., which used a superior longitudinal design, corroborated this finding. Rather, the course of PTSD is characterized by a pattern of increase in symptoms soon after the trauma, followed by a plateau, with no evidence of delayed onset or alterations between symptom clusters. The study of Koren et al., however, almost has the disadvantage of being so simple that it is obvious. That is,

their finding of a correlation between symptoms at successive points in time is a natural part of any disorder's progression in time. Another limitation of this study is the lack of assessment of symptoms of acute stress disorder. This study does shed light, however, on important issues of PTSD and comorbidity, showing that depression and non-PTSD anxiety disorders developed in conjunction with PTSD in stress survivors. This is consistent with other data, e.g., from the National Vietnam Veterans Readjustment Study (10), which showed that rates of depression and anxiety disorders (as well as alcohol and substance abuse) are higher in combat veterans with PTSD. On the basis of these findings, comorbid depression should be seen as secondary to PTSD (or a parallel response to trauma) but not as a unique disorder.

Ursano and colleagues have shown that personal identification with the dead increased risk for chronic PTSD. This study underlies the important role of unresolved grief in the response to stress. Traumatic grief is currently proposed as a diagnosis to capture pathological responses to bereavement (11). It is unclear whether individuals who identify with the dead have differences in personality, premorbid trauma, or psychiatric history, for which identification with the dead merely serves as a proxy (i.e., identification with the dead is not the primary risk factor).

The more that traumatic stress is examined, the more it becomes apparent that it may have far-reaching influences on all of the major psychiatric disorders. This has led to a tendency for PTSD to become like a fast-moving train that threatens to take along everything in its path. There is a natural tendency to resist stress-related diagnoses, given their potentially explosive impact on societal approaches to responsibility and accountability. The challenge to our field is to find the appropriate balance.

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